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Aliens or the SR-71 Blackbird?

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Unidentified flying objects (UFOs) capture the interest of our students and the general public.^{1,2} Here is a UFO story I tell my students to illustrate the workings of science. Science, at its most fundamental level, is observation and an attempt to analyze what is observed. But what happens when an observation cannot be explained with the available knowledge at the time? What do we do? The UFO sighting of my story could not be explained until disclosure of a top-secret military aircraft, the SR-71, also known as the “Blackbird.”

A commercial airline pilot was flying passengers as usual during the 1960s. One day during flight, he was shocked to see a long black cigar-shaped object appear to the side of the airplane. The black object rapidly

accelerated to an incredible speed, vanishing from the commercial airplane’s radar screen in a surprisingly short time. The pilot and copilot of the commercial airplane looked at each other in disbelief.

Years later the pilot shared this story with his son, who is a physician and friend of mine. I ask my students first to assess the integrity of the data. We have a commercial pilot who confides to his son this sighting of a UFO. The son becomes a medical doctor. Can we assume these individuals are giving us a reliable account?

For several years I had no plausible explanation as to what had occurred. Does that mean the black cigar-shaped object was an alien spacecraft? I ask the students if they would jump to this conclusion if no



Fig. 1. The SR-71 Blackbird, Lackland Air Force Base, Texas. This photo of the author standing in front of the SR-71 was taken by the author’s son Evan.

other evidence were available. We should be reluctant to hastily accept the alien scenario. On the other hand, we may be quite uncomfortable with the feeling of mystery created by not having an alternate explanation. Often, scientific discovery includes elements of surprise. Insight can occur when one least expects it. I experienced one such moment during the summer of 2002.

My family and I were on vacation visiting my father-in-law, a retired U.S. Air Force officer. He had taught pilots during World War II and had retired in Texas a few years before our visit. One day he took us to the nearby Lackland Air Force Base to see the outdoor museum of military aircraft. I stopped in amazement when my eyes met a long black cigar-shaped object. It was the SR-71, a high-performance craft capable of traveling at Mach 3+, i.e., over three times the speed of sound.³

It immediately dawned on me that the UFO seen by my friend's dad could have been an SR-71. This military craft could have been somewhat off course⁴ and ascending to its normal flight altitude of 80,000 ft. The SR-71 was a top-secret spy jet during its main use of operation from 1966 to 1990. At the time of its retirement⁵ by the Strategic Air Command in 1990, the Blackbird was still the fastest and highest-flying operational aircraft in the history of aviation. The black paint helped the aircraft radiate heat from its skin due to friction at high speeds. There were no defense weapons on the SR-71.^{6,7} The defense was sheer speed. At this point, student interest increases as questions arise concerning how fast bullets and missiles travel.

Although President Johnson⁷ announced the existence of the SR-71 in 1964 and the craft set a speed record⁸ in an international air show 10 years later, much about the SR-71 over the years has been shrouded in secrecy. Even as late as its official retirement in 1990, when the Blackbird made one of its rare public displays, many of the capabilities of the SR-71 remained secret.⁹

It is therefore understandable that an airline pilot such as our UFO observer would not have recognized an SR-71 even after 1970, when the super secret era had passed. In fact, many UFO sightings during the late 1950s through the 1960s were fleeting glimpses of the U-2 and SR-71 spy planes.¹⁰ These observed objects were really Unidentified Air Force Objects

(UAFOs).¹¹

The Air Force would misdirect the public, indicating that such observations were mirages due to ice crystals and temperature inversions.¹⁰ Once an SR-71 going into Griffiss Air Force Base (NY) created such a sonic boom that the media contacted a geophysics and seismology expert. He said it could have been a large meteor entering the atmosphere. Of course the U.S. Air Force did not come forward to correct him.⁴

In summary, students learn that questions in science can take years to answer. Patience is required and clues can come at the least expected moments. I like to end my discussion of the SR-71 by showing a 10-second silent video clip of this majestic aircraft gracing the sky.¹²

Though I had the pleasure of meeting the pilot who reported the UFO sighting to his medical-doctor son, I never did get a chance to discuss the SR-71 with him. He had passed away by the time I first saw the SR-71 in Texas and formulated a probable explanation for him concerning what was observed in the sky over a generation ago.

Acknowledgment

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References

1. Philip J. Klass, *UFOs: The Public Deceived* (Prometheus Books, New York, 1983). Klass argues against the belief that there is some government cover-up of alien visitors. A simpler explanation is that 98% of UFOs are misidentifications by honest people and 2% are hoaxes or delusions (p. 297). This book was reviewed in this journal: Earl R. Meyer, "Squidboats not UFOs," *Phys. Teach.* **21**, 558 (Nov. 1983).
2. Alexander K. Dickison, "Interesting—But UFOs still unidentified," *Phys. Teach.* **20**, 128 (Nov. 1982), a review of the book *Project Identification: The First Scientific Study of UFO Phenomena* by Harley D. Rutledge (Prentice Hall, NJ, 1981).
3. Although Mach speed is technically defined as the speed of sound at the altitude one flies, I have my students use sound speed at sea level at typical temperature and pressure: $340 \text{ m/s} = 1100 \text{ ft/s} = 750 \text{ mi/h} = \text{"Mach 1."}$
4. Richard H. Graham, *SR-71 Blackbird: Stories, Tales, and Legends* (Zenith Press, St. Paul, MN, 2002). Gra-

ham describes a case (p. 52) where once a Blackbird flying over Arizona strayed into Mexican airspace. While great care is taken with flight plans and air-traffic control, deviations from the ideal can occur from time to time.

5. See Ref. 4 for a discussion of the debates in the 1990s to reinstate the SR-71, the reactivation of three SR-71s in 1995, and the final shutdown of the SR-71 program in 1999.
6. Plaque at Lackland Air Force Base, Texas.
7. Tony Landis, "Mach 3 masterpiece: The SR-71 Blackbird story," *Airpower* 33, 28 (May 2003).
8. In 1974, an SR-71 set a speed record flying from New York to the Farnborough International Airshow in England. See Ref. 4.
9. "Spy plane sets speed record, then retires," *New York Times*, (March 7, 1990), p. A16.
10. William J. Broad, "C.I.A. admits government lied about U.F.O. sightings," *New York Times*, 12 (Aug. 3, 1997), p. 12.
11. David C. Morrison, "Unidentified Air Force objects," *Natl. J.* 24, 2036 (Sept. 5, 1992).
12. Dryden Flight Research Center Website, <http://www.dfrc.nasa.gov/>, (Movie EM-0025-02, SR-71 Flyover, 14 seconds).

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